

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS**

**IN RE: LOCAL TV ADVERTISING
ANTITRUST LITIGATION**

This document applies to all actions.

Master Docket No. 18-06785

MDL No. 2867

The Honorable Judge Virginia M. Kendall

**STIPULATION AND ORDER REGARDING THE PRODUCTION OF DOCUMENTS
AND ELECTRONICALLY STORED INFORMATION**

It is hereby stipulated and agreed, by and between Plaintiffs and Defendants (collectively, “the Parties,” and each a “Party”), by their respective counsel in the above-captioned action (“Action”) as follows:

1. PURPOSE

- 1.1 Unless otherwise agreed to by the parties or ordered by the Court, this Stipulated Order Regarding the Production of Documents and Electronically Stored Information (“Order”) shall govern the search, disclosure, and format of Documents and ESI produced for use in this Action. The purpose of this Order is to expedite the flow of discovery and facilitate the prompt resolution of disputes should they arise.
- 1.2 Nothing in this Order establishes any agreement as to the subject matter scope of discovery in this Action or the relevance of any particular information. No provision of this Order waives any objections as to the production, discoverability, admissibility, or confidentiality of Documents and ESI. The discovery requests, objections thereto, agreements between or among the Requesting Party, Receiving Party, and/or Producing Party, and any pertinent Court orders in this Action shall govern the subject matter scope of discovery.

- 1.3 With respect to ESI, the inclusion of a data type as an example of a type of ESI in the Definitions herein should not be construed as an agreement by a Producing Party that these types of ESI may be relevant and/or must be collected, searched, or produced. Similarly, the exclusion of a data type as an example of a type of ESI in the Definitions herein shall not be construed as agreement by the Requesting Party that these types of ESI are irrelevant and/or need not be collected, searched, or produced.
- 1.4 Nothing in this Protocol is intended to be an exhaustive list of discovery obligations or rights of a Producing Party or a Requesting Party. To the extent additional obligations or rights not addressed in this Protocol arise under the Federal Rules of Civil Procedure, local rules, or applicable state and federal statutes, they shall be controlling.

2. DEFINITIONS

- 2.1 “Archival Storage” and “Archival Systems” mean long-term repositories for the storage of records that preserve the content of the Documents or data stored therein, prevent or track alterations to such Documents or data, and control access to electronic records.
- 2.2 “Archival Data” means information maintained for Archival Storage that is not immediately accessible to a user of a computer system.
- 2.3 “Backup Media” refers to magnetic tapes, CDs, DVDs, hard drives or other storage onto which Backup Systems store electronic information.
- 2.4 “Backup Systems” refers to computer systems used to store copies of electronic information on Backup Media to permit recovery of the information in the event of loss or damage to the original data.
- 2.5 “Custodian” shall mean any individual of a Producing Party for whom the Producing Party will produce Documents either as disclosed during good faith meet and confers

between the Parties or by an order of the Court.

- 2.6 “Requested Custodian” shall mean any individual of a Producing Party that the Requesting Party believes has possession, custody, or control of potentially relevant Documents or ESI, and which the Requesting Party asks that Producing Party consider in good faith including as a Custodian.
- 2.7 “Custodial Data Source” means any data source used for business purposes that is in the possession, custody, or control of a Producing Party, in or on which the Producing Party knows or reasonably believes that a Custodian for said Producing Party stored potentially relevant Documents, ESI or Hard Copy Documents, whether or not created or generated by a Custodian, including but not limited to personal computers, laptops, tablets, email (whether stored locally or centrally), mobile devices, shared network servers, shared or individual network folders, cloud storage systems, structured data systems, or social media.
- 2.8 “Defendants” refers to CBS Corporation n/k/a ViacomCBS Inc., Cox Media Group, LLC, Dreamcatcher Broadcasting, LLC, The E.W. Scripps Company, Griffin Communications, LLC, Fox Corporation, Katz Media Group, Inc., Meredith Corporation, Nexstar Media Group, Inc., Gray Media Group, Inc. f/k/a Raycom, Inc., Sinclair Broadcasting Group, Inc., TEGNA, Inc., Tribune Broadcasting Company, LLC, and Tribune Media Company.
- 2.9 “Document” shall have the meaning contemplated by Federal Rule of Civil Procedure 34(a)(1)(A) and shall include ESI as well as Hard Copy Documents.
- 2.10 “Document Family” means a collection of pages or files maintained together constituting a logical single communication of information, but consisting of more than a single stand-alone record. Examples include an email and associated attachments, or a presentation

with embedded files.

- 2.11 “Email” means an electronic means for communicating written information that is deliverable to designated recipients at specific addresses associated with particular Internet domains.
- 2.12 “ESI” is an abbreviation of “electronically stored information” and shall have the same meaning and scope as it has in Federal Rule of Civil Procedure 34(a)(1)(A).
- 2.13 “Extracted text” or “Full Text” means the text extracted from a Native Document, and includes all header, footer and document body information when available. A “Text File” is a file containing the full text of native files extracted directly from the native file, or, in the case of Hard Copy Documents or scanned PDF documents for which OCR otherwise is to be provided, a file containing the text resulting from the OCR.
- 2.14 “Hard Copy Document” means a Document that was maintained in paper form.
- 2.15 “Load File” means an electronic file that is used to import all required production information into a Document database, including, if available, Document images, Full Text or OCR text, Native Format files where required by this Order, and reasonably available Metadata, as well as information indicating Document breaks, and Document relationships such as those between an Email and its attachments. For files produced as TIFF images, each page of a Document shall be electronically saved as an image file. The Producing Party shall produce a unitization file, a type of load file, for all produced Documents and ESI in accordance with the specifications provided in Exhibit A.
- 2.16 “Metadata” means structured information about ESI that is created by the file system or application, embedded in the Document and sometimes modified through ordinary business use. Metadata of the ESI describes, inter alia, the characteristics, origins, usage

and validity of the ESI.

- 2.17 “Native Format” means the format of ESI in the application in which such ESI was originally created.
- 2.18 “Network” or “Shared Storage Systems” shall mean any data storage device accessible to multiple users remotely over a computer network.
- 2.19 “Non-Custodial Data Source” means any data source that is not kept or maintained by any particular Custodian, but which is known to contain a meaningful volume of unique potentially relevant Documents or ESI, including data sources used by any department, business unit, or division of a Producing Party, and Shared Storage Systems that may contain potentially relevant information, such as shared electronic drives or shared filing cabinets.
- 2.20 “OCR” means the optical character recognition technology used to read paper Documents or electronic images of Documents and output such Documents to a searchable text format. The latter text is also referred to as the “OCR text” or simply “OCR.”
- 2.21 “Plaintiffs” refers to Thoughtworx, Inc. D/B/A MCM Services Group and One Source Heating and Cooling, LLC.
- 2.22 “Production” or “Produced” includes any exchange of Documents or ESI by a Producing Party, whether voluntarily or in response to a formal or informal request.
- 2.23 “Producing Party” means any party or third party that produces Documents or ESI pursuant to this Order.
- 2.24 “Receiving Party” means any party or third party that receives Documents or ESI produced in the litigation.
- 2.25 “Requesting Party” means any party that requests production of Documents or ESI in the

litigation.

- 2.26 “Search Term” means a word or a combination of words or phrases designed to capture potentially relevant ESI, and includes strings of words and phrases joined by proximity and Boolean connectors or other syntax.
- 2.27 “Static Image” means or refers to a representation of ESI produced by converting a native file into a standard image format capable of being viewed and printed on standard computer systems.
- 2.28 “Tagged Image File Format” or “TIFF” refers to the CCITT Group IV graphic file format for storing bit-mapped images of ESI or Hard Copy Documents.
- 2.29 “TAR” (Technology-Assisted Review) means a process for prioritizing or coding a collection of ESI using a computerized system, using algorithms or systematic rules, that harnesses human judgments of subject matter expert(s) on a smaller set of Documents and then extrapolates those judgments to the remaining Documents in the collection. TAR systems generally incorporate statistical models and/or sampling techniques to guide the process and to measure overall system effectiveness.
- 2.30 “Structured Data” means data that resides in a fixed field within a record or file, or stored in a structured format, such as databases (such as Oracle, SQL, Access) or data sets, according to specific form and content rules as defined by each field of the database.
- 2.31 “Unstructured Data” refers to free-form data which either does not have a data structure or has a data structure not easily readable by a computer without the use of a specific program designed to interpret the data, including but not limited to, word processing documents, slide presentations, email, PDFs, spreadsheets, and webpages, blogs, image files, instant messages, audio and video files, and others of similar variable format.

3. ESF DISPUTES

- 3.1 If the parties have reached an impasse regarding the discovery of records from a database, server, computer, service provider, or similar electronic storage facility (“ESF”), before filing a motion to compel, the parties are required to meet and confer. Both parties shall ensure that a sufficiently knowledgeable representative is present during any meet and confer.

4 SEARCH METHODOLOGIES FOR UNSTRUCTURED DATA

4.1 In General:

- 4.1.1 After a Producing Party has had a reasonable opportunity to investigate potential data sources and search methodologies, the Producing Party shall make such disclosures regarding their planned search methodology as will permit the Receiving Party to evaluate the reasonableness of that methodology and enable meaningful meet and confers. These disclosures shall include the type of methodology to be used (e.g., Search Terms, TAR, etc.) and the Custodial Data Sources and Non-Custodial Data Sources to which they will be applied, along with information sufficient for the Requesting Party to evaluate the reasonableness of the proposed custodians and the Custodial Data Sources and Non-Custodial Data Sources to be searched (including organizational charts, where available and relevant, and descriptions of the proposed custodians’ functions, duties, and responsibilities).
- 4.1.2 Any search methodology used by a Producing Party to search for responsive Documents and ESI will search any associated attachments and embedded files.

- 4.1.3 On the basis of the Producing Parties' disclosures, the Requesting Party shall consider whether the custodians and methodology are reasonable and appropriate, and the Producing Party and Requesting Party shall meet and confer as needed. The Requesting Party shall have the right to request and receive reasonable additional information necessary to evaluate the proposal, and shall have the right to propose additional Requested Custodians or changes to methodology. The Producing Party shall consider in good faith whether such proposed changes are appropriate.
- 4.1.4 If after good faith consideration the Producing Party refuses to adopt any change proposed by the Requesting Party, the Requesting Party may move the Court for relief.
- 4.2 To the extent a Producing Party intends to use search terms and/or Boolean search strings (together, "Search Terms") or other limiters, including, by way of example only, date ranges and email domains in Metadata fields, as a means of limiting the volume of information to be reviewed for responsiveness that Producing Party shall disclose the following to the Requesting Party:
- 4.2.1 The custodians whose ESI will be searched using Search Terms, and a description of the Custodial Data Sources and Non-Custodial Data Sources against which the limiters and/or Search Terms shall be run; and
- 4.2.2 An initial list of the limiters and/or Search Terms the Producing Party intends to use.
- 4.3 TAR and Similar Advanced Analytics: If a Producing Party elects to use TAR or similar

advanced analytics as a means of including or excluding Documents and ESI to be reviewed for responsiveness or of culling or otherwise limiting the volume of information to be reviewed for responsiveness, prior to the use of such tool the Producing Party shall disclose to the Requesting Party (1) the Custodial Data Sources and Non-Custodial Data Sources against which TAR will be run; (2) a description of the proposed TAR process; (3) the TAR or advanced analytics vendor and methodology being deployed; and (4) any other disclosures that are reasonably necessary for the Requesting Party to evaluate the reasonableness of the TAR process. To the extent a Producing Party intends to use Search Terms to pre-cull ESI prior to application of TAR and/or advanced analytics, it shall disclose to the Requesting Party a description of how such pre-culling is to be applied.

5 SEARCH METHODOLOGIES FOR STRUCTURED DATA

5.1 Where a discovery request requires production of Structured Data, in lieu of producing the native database or TIFF images of database content, the Producing Party shall identify such Structured Data sources within a reasonable period after receiving the discovery request and disclose how it intends to extract and produce data from these sources. The Parties shall meet and confer regarding these disclosures.

5.2 The Requesting Party shall have the right to request and receive a sample production in the format proposed by the Producing Party. Upon review of the sample, the Requesting Party may make reasonable requests for additional information to explain the database schema, codes, abbreviations, and different report formats or to request specific data from identified or additional fields. The Producing Party shall consider in good faith whether such proposed changes are appropriate.

- 5.3 If after good faith consideration the Producing Party refuses to adopt any change proposed by the Requesting Party, the Requesting Party may move the Court for relief.

6 PRODUCTION FORMAT

- 6.1 Format Guidelines: Each Producing Party shall, to the extent reasonably and technically possible, produce Documents and ESI according to the specifications provided in Exhibit A. The Requesting Party, Receiving Party, and/or Producing Party, as appropriate, agree to meet and confer in good faith if any of the technological specifications set forth in Exhibit A result in technological issues. Notwithstanding this provision or any other provision of this Order, if a Producing Party produces materials in this Action that it previously produced in a different action or proceeding, including in connection with any DOJ investigation, replication of the specifications of the original production shall be deemed sufficient.

- 6.2 De-Duplication: The Producing Party need only produce a single copy of a particular electronic Document.

- 6.2.1 Vertical Deduplication. A Producing Party may de-duplicate ESI vertically by Custodian, provided however, that an email that includes content in the BCC or other blind copy field shall not be treated as a duplicate of an email that does not include content in the BCC or other blind copy field, even if all remaining content in the email is identical.

- 6.2.2 Horizontal Deduplication. A Producing Party may de-duplicate ESI horizontally (globally) across the population of records, if the Producing Party discloses to the Receiving Party and the Requesting Party that it has deduplicated horizontally, and provided further that: (i) an email that includes content in the BCC or other

blind copy field shall not be treated as a duplicate of an email that does not include content in the BCC or other blind copy field, even if all remaining content in the email is identical; and (ii) all Custodians who were in possession of a de-duplicated Document, and the directory structure where the Custodian stored the de-duplicated Document, must be identified in the AllCustodian Metadata field specified in Exhibit A. To ensure accuracy, the All Custodian Metadata field must be captured by an automated process and cannot be populated using a manual process. The aforementioned Metadata must be produced to the extent it exists. In the event of a rolling production of Documents or ESI items, the Producing Party shall provide an overlay load file with an updated AllCustodian Metadata field no later than the substantial completion deadline. The Metadata overlay may contain a full refresh of data for the AllCustodian Metadata field or be a supplement to the information previously provided for the fields. At the time of production, the Producing Party shall identify the overlay as a full refresh or a supplement. A Metadata overlay file shall be either a full refresh overlay or a supplemental overlay.

- 6.2.3 A Producing Party using a centralized system (or “journaling”) as a preservation and backup system for email may not possess certain Metadata, such as “Importance.” Where Documents or ESI are produced from such a centralized system, in the production cover letter the Producing Party shall, to the extent practicable, identify the centralized system in the “Source” Metadata field for the Documents or ESI produced from such system, or identify by Bates Number which Documents or ESI are being produced from a centralized system.

6.2.4 Methodology. If a Producing Party elects to de-duplicate, the Producing Party shall identify ESI duplicates by using industry standard MD5 or SHA-1 algorithms (or a reasonably equivalent alternative) to create and compare hash values for exact duplicates only. Other methodologies that are substantially different for identification of duplicates must be disclosed to the Requesting Party before implementation. The resulting hash value for each item shall be reflected in the HASH Value field specified in Exhibit A.

6.2.5 The Requesting Party and Producing Party hereby agree that production of Documents and ESI globally de-duplicated in accordance with the provisions of this Order shall constitute production of Documents and ESI as maintained in the ordinary course of business. No Producing Party shall be required to, but may, eliminate duplicates by manual review, except that Hard Copy Documents that are exact duplicates of electronic versions cannot be deduplicated unless it is an exact copy of an electronic version(s) located within the same Custodian's files. Such Documents could include copies of marketing materials printed and stored in boxes but never used, or conference programs printed but not distributed. However, any document containing handwritten notes or markings would not be considered a duplicate of an electronic version and if responsive must be produced as an original document. Likewise, printed out electronic documents not bearing markings but whose removal would undermine the completeness of a hard copy file must be produced if responsive.

6.3 Email Thread Suppression: Email threads are email communications that contain prior or lesser-included email communications. An inclusive email is an email that contains

content that is unique from other emails in the thread. Examples of inclusive emails include last-in-time emails in a thread, emails with unique attachments within a thread, and emails with a blind copy. A non-inclusive email is an email in an email thread whose content is fully included in another inclusive email. A Producing Party may use e-mail thread suppression to exclude non-inclusive emails from production, provided however, that an email that includes an attachment or content in the BCC or other blind copy field shall not be treated as a lesser-included version of an email that does not include the attachment or content, even if all remaining content in the email is identical.

6.4 Documents to Be Produced Natively: A Producing Party shall produce PowerPoint, Excel and other spreadsheet files, including comma or tab delimited text files, Microsoft Access files, and video or audio files in Native Format. Other document types which may be difficult or costly to be accurately imaged, may be selected to be produced natively at the Producing Party's discretion. The production Load Files shall contain a link to the produced Native Format files as specified in the "NativeLink" Metadata field described in Exhibit A. Each electronic file produced in Native Format shall be assigned a unique Bates Number as set forth in Paragraph 6.6, and the database record for that file shall include a single page TIFF image branded with this unique Bates Number, any confidentiality designation, and a standardized phrase indicating that the document was produced in native format (i.e., PRODUCED IN NATIVE FORMAT). The cost of converting native files to TIFF shall not be a taxable cost in this litigation.

6.5 Unitization: In scanning Hard Copy Documents, distinct Documents shall not be merged into a single record, and single Documents shall not be split into multiple records. The Producing Party shall take reasonable steps to physically unitize Hard Copy Documents.

For example, for Documents stored in a binder, folder, or similar container (each, a “container”), reasonable steps shall be taken to produce them in the same order as they appear in the container. Similarly, for pages that are stapled or clipped, reasonable steps shall be taken to produce them as a single document and not multiple one-page documents. The Producing Party shall undertake reasonable efforts to, or have its vendors, logically unitize (i.e., use cues such as consecutive numbering, report titles, similar headers and footers, and other logical cues that indicate the pages belong together) Hard Copy Documents that are not otherwise bound. This provision does not obligate any Producing Party to reassemble Document Families for Hard Copy Documents that are not stored or maintained as Document Families in the location in which members of that family are found or as they are kept in the ordinary course of business. Nor shall this provision obligate any Producing Party to make whole any Document that is not stored or maintained in its complete form.

- 6.6 Bates Numbers and Confidentiality Designations for TIFF Images: Each page of a Document produced in the litigation in TIFF file format shall have a legible numeric identifier (“Bates Number”) electronically “burned” onto the image that must reasonably identify the Producing Party. If warranted, consistent with the terms of any applicable protective order, each page of a Document shall have either “CONFIDENTIAL” or “CONFIDENTIAL – ATTORNEYS’ EYES ONLY” electronically “burned” onto the image. The Producing Party will make reasonable efforts to avoid obscuring any information originally appearing on the document and will consider whether it is reasonably necessary to reproduce any such document on request. In the event that the metadata and branding for confidential designation do not match, the Receiving Party

shall, upon discovery of the issue, notify the Producing Party within (5) days, and from the time of discovery of the issue until the appropriate confidential designation is specified by the Producing Party, the Receiving Party shall treat the document consistent with the higher level of confidentiality.

- 6.7 Metadata Fields and Processing: A Producing Party is not obligated to populate manually any of the fields in Exhibit A, with the exception of the following, which must always be populated for Documents and ESI: (a) BegBates, (b) EndBates, (c) Custodian, (d) RecordType, (e) Production Volume, and (f) SourceParty. Additionally, the Producing Party must populate the following fields in Exhibit A if applicable and reasonably and technically possible: (a) Confidentiality, (b) PageCount, (c) AllCustodian (which is required if performing horizontal deduplication), (d) Redacted, (e) Redaction Basis and (f) family designation fields sufficient to identify all members of a Document Family (e.g., BegAttach and EndAttach, or ParentBates and AttachBates, or AttachRange). To the extent reasonably available, Metadata identified in Exhibit A shall be provided in a Concordance-format delimited file with a .DAT file extension using Concordance default delimiters, including ASCII 020 and 254 delimiters for column break and text qualifier, and new line as ASCII 174. The first line shall be the header with field names, and each subsequent line shall contain the fielded data for each Document.
- 6.8 Production Media: The Producing Party shall produce Document images, Native Format files, Text and/or OCR files, Load Files, and Metadata on hard drives, CDs, DVDs, secure FTP, or other secure file transfer utility or other mutually agreeable media ("Production Media"). Production volumes may be produced via FTP or other electronic transfer system, without a separate agreement.

6.8.1 Productions made via FTP or other electronic transfer are not required to be supplemented with hard media containing the same Documents. Each piece of hard media shall include a unique identifying label providing the identity of the Producing Party, the case number, the date of the production of Documents on the hard media, the disk number (1 of X, 2 of X, etc.) if applicable, Production Volume, and the Bates Number ranges of the Documents in the production. For productions delivered via a secure file transfer utility, the Producing Party shall provide a cover letter or cover email containing the information that would otherwise be on the label. All productions shall be checked and produced free of computer viruses. To the extent that the Production Media includes any confidential information protected under any applicable protective order filed with the Court, the label on such Production Media shall indicate that the Production Media includes information so designated. Further, any replacement Production Media shall cross-reference the original Production Media, clearly identify that it is a replacement, and cross-reference the Bates Number range that is being replaced. All Production Media that is capable of write protection should be write-protected before production.

6.8.2 All Production Media must be encrypted, with the Producing Party to provide a decryption key at the time of production.

6.9 Redacted Documents: In the event that a Document is redacted, Metadata fields may be redacted if they contain redactable information, and the Native Format version need not be produced. When a Document is redacted, the TIFF image should show the word “redacted” where applicable and a production Load File field should be populated to

indicate the Document contains a redaction. If a Document to be produced in Native Format requires redaction, that Document may be produced in redacted Native Format, at the Producing Party's discretion, and to the extent reasonably and technically possible. Should a Producing Party believe that redacting a file is overly burdensome, the Producing Party, may request a meet and confer to determine if an alternative means of production would be appropriate, such as creating a new native document which contains the tab and heading structure of the original file with only the excerpted responsive data ("Extracted Document"), along with a brief explanation of what has been excluded. If the Parties agree and the Producing Party creates such an Extracted Document, it shall so indicate in the metadata that the Extracted Document is an extract. The Receiving Party may request that any such Extracted Document be produced in its original form with redactions and the parties shall meet and confer concerning any such request.

If redacting TIFF images, the Producing Party, or its ediscovery vendor, shall: (1) reveal hidden rows, columns or sheets prior to converting the Document to TIFF; (2) clear any filters that may conceal information; (3) adjust column widths so that numbers do not appear as "#####"; (4) ensure that column and row headings print; (5) ensure that the tab name appears in the header or footer of the document; (6) process comments so that they are produced at the end of the spreadsheet; (7) process spreadsheets so that they print across then down; and (8) process presentation Documents (e.g., PowerPoints) so that all speaker notes and comments are visible. If a Requesting Party or Receiving Party receives a redacted TIFF image of a Document required herein to be produced in Native Format that the Requesting Party or Receiving Party does not believe is formatted so as to be legible (e.g., column cells display "##### instead of the value) or if a

Requesting Party or Receiving Party wants additional information from an Excel-type spreadsheet (e.g., formulas), the Requesting Party or Receiving Party may request from the Producing Party a legible TIFF image or a redacted native item. At that time, the Requesting Party or Receiving Party will explain a reasonable basis for its request and will provide a specific Bates Number range for the ESI at issue. Upon receiving such a request, the Producing Party shall either produce a legible TIFF image, or redacted native item or disclose to the Requesting Party or Receiving Party why it is unreasonable or unnecessary to do so. If the Producing Party encounters Microsoft Access files or audio or video files or other file types requiring native production that contains privileged content, the Requesting Party, Receiving Party, and Producing Party, as appropriate, shall meet and confer to determine a suitable manner of producing the non-privileged, responsive content contained in these files.

- 6.10 Attachments: Email attachments and embedded files must be mapped to their parent Document by the Bates Number by including a “BegAttach” field designating the beginning of each such attachment and “EndAttach” field designating the end of each such attachment. If attachments and embedded files cannot be separated from their parent Documents, then “BegAttach” and “EndAttach” fields listing the unique beginning and end number for each attachment or embedded Document must be included. Non-substantive automatically-generated embedded files, such as logos, embedded, non-substantive formatting files such as .ole or .dll formats, or confidentiality legends need not be produced as separate attachments. To the extent they are maintained together, all Documents in a Document Family shall be consecutively Bates Number stamped with the child Documents produced immediately after the parent-document.

6.11 Text Files: Each Document produced under this Order shall be accompanied by a single, multipage text file containing all of the text for that Document (as opposed to one text file per page of such Document). Each text file shall be named using the Bates Number of the first page of the corresponding production item.

6.11.1 ESI: The text of each ESI item shall be extracted directly from the ESI native file. To the extent that is not technically possible (e.g., the underlying native file is an image file), OCR shall be provided to the extent it exists. For contacts and calendars, user modifiable fields shall be extracted and produced as text.

6.11.2 OCR: To the extent that Documents have been run through OCR software, the full text shall be provided on a document-level basis in an appropriately formatted text file (.txt) that is named to match the first Bates Number of the document. Text files shall be provided in a "Text" folder. To the extent that a Document is redacted as allowed under this Order, the text files shall not contain the text of the redacted portions, but shall indicate where the redactions were made, e.g., with the notation "REDACTED." There is no obligation to OCR any electronic Documents that do not natively exist in a text-searchable format.

6.12 Password Protected Files: The Producing Party shall make reasonable efforts to ensure that all encrypted or password-protected Documents are successfully processed for review and production under the requirements of this Order, and the decrypted Document is produced. The Requesting Party, Receiving Party, and/or Producing Party, as appropriate, shall meet and confer regarding any requests that a Producing Party undertake additional efforts to decrypt files after production.

- 6.13 Embedded Documents: Embedded ESI documents (e.g., a spreadsheet embedded within a word processing document) will be extracted, produced as an independent Document, and related back to the respective top-level parent document (e.g., standalone file, email message, etc.) via the BegAttach and EndAttach fields referenced in Exhibit A. Related embedded documents will be produced within a continuous Bates Range.
- 6.14 Compressed and Container Files: Compression file types (e.g., .CAB, .GZ, .RAR, .ZIP), shall be decompressed to ensure that a compressed file within a compressed file is decompressed into the lowest possible compression resulting in individual folders and/or files. Original compression files and container files need not be produced, provided the responsive content files are produced in accordance with the specifications of this Order.
- 6.15 Custodian or Originating Source: The custodian or originating source shall be identified in the Custodian field of the database load files, as provided in Exhibit A. Documents and ESI found in the possession of a natural person (or on a natural person's hardware or storage media) shall be produced in such fashion as to identify the natural person. Documents and ESI found in the possession of a department, group, entity, or other common facility (e.g., office, file room, archive, network storage, file share, back-up, hard drive, etc.) shall be produced in such a fashion as to identify the department, group, entity, or facility and the individuals that had access to the material. A Producing Party shall use a uniform description of a particular Custodian across productions.

7 PROCESSING SPECIFICATIONS

- 7.1 The Producing Party shall collect and process Documents using reasonable methods

that preserve available data.

7.2 To the extent reasonably feasible upon collection, the Producing Party shall use the following specifications when converting ESI from its Native Format into TIFF image files prior to production:

- 7.2.1 All tracked changes shall be maintained as last saved, to the extent reasonably feasible upon collection, so that all changes to a Document are evident, unless redactions were necessary to remove privileged material.
- 7.2.2 All Word Documents shall include and show field codes for auto-date and auto-time fields.
- 7.2.3 Author comments shall remain or be made visible, unless redactions were necessary to remove privileged material.
- 7.2.4 Presenter notes within a presentation shall be made visible, to the extent reasonably feasible upon collection and unless redactions were necessary.
- 7.2.5 Each Party may process its data in any time zone. Any Party that processes its data in a time zone other than Eastern Standard Time shall also provide “EST MasterDate” and “EST MasterTime” fields as defined in Exhibit A.
- 7.2.6 To the extent technically feasible, ESI items shall be processed in a manner that maintains and displays all hidden columns or rows, hidden text or worksheets, speaker notes, tracked changes and comments (i.e., shall force on hidden columns or rows, hidden work sheets, track changes, can comments). If the file ordinarily to be produced as a TIFF under this Order that cannot be expanded, the Producing Party must provide the Receiving Party with the native format.
- 7.2.7 ESI items shall be processed so as to maintain the date/time shown in the

Document as it was last saved by the custodian or end user, not the date of collection or processing (i.e., shall force off Auto Data).

7.2.8 If a Document otherwise subject to production in TIFF under this Order cannot be converted to TIFF without error due to corruption or some other issue that renders the Document unreviewable, the Document shall be produced in native format.

7.2.9 English Language: If no English version of a Document is available, the Producing Party has no obligation to produce an English translation of that Document and does not have an obligation to render that Document text searchable via OCR or other means if the foreign language does not use the Latin alphabet. The Producing Party shall make reasonable efforts to ensure that all technologies and processes used to collect, process and produce the text of any Document – including all TIFF conversion and OCR processes, and the extraction of text from native files – preserves all foreign language text, punctuation and other characteristics as they exist in the source native file. To the extent reasonably and technically possible, foreign language text files shall be delivered in UTF-8 and be Unicode compliant, with the correct encoding to enable the preservation of the Documents' original language.

8 AMENDMENT OF ORDER AND RESOLUTION OF DISPUTES

8.1 Nothing herein shall preclude any Requesting Party, Receiving Party, or Producing Party from seeking to amend this Order in writing, provided, however, that no Requesting Party, Receiving Party, and/or Producing Party may seek relief from the Court concerning compliance with the Order until that Requesting Party, Receiving

Party, and/or Producing Party has met and conferred in good faith with the other Requesting Party, Receiving Party, and/or Producing Party involved in the dispute, as set forth in Part 3 above.

8.2 Any Requesting Party, Receiving Party, or Producing Party added or joined to this litigation after the date of this Order that seeks to deviate from this Order must obtain leave of Court to do so unless every affected Requesting Party, Receiving Party, and Producing Party consent to the proposed deviation in writing. Before seeking Court intervention, every affected Requesting Party, Receiving Party, and Producing Party shall meet and confer in good faith regarding any modification.

8.3 In light of the disparate data systems and architectures employed by various entities, variations from this Order may be required. In the event that any Requesting Party, Receiving Party, or Producing Party identifies a circumstance where application of this Order is not technologically possible, would be unduly burdensome or impractical, or when another process would satisfy the objective and reach the same result with less burden, the Requesting Party, Receiving Party, or Producing Party will notify the affected Requesting Party, Receiving Party, or Producing Party of the exception and before implementing an alternative, specify an alternative procedure that is not unduly burdensome or impractical that will be employed, if one exists. Upon request by any affected Requesting Party, Receiving Party, or Producing Party, those affected Requesting Parties, Receiving Parties, and/or Producing Parties will meet and confer regarding the circumstances and proposed alternative approaches.

8.4 Nothing in this Order waives the right of any Producing Party to petition the Court for an Order modifying the terms of this Order upon sufficient demonstration that

compliance with such terms is either (1) unexpectedly or unreasonably burdensome, or (2) impossible, provided, however, that counsel for such Producing Party must first meet and confer with counsel for the Requesting Party, and the Requesting Party and Producing Party shall use reasonable best efforts to negotiate an exception from or modification to this Order prior to seeking relief from the Court.

9 ASSERTIONS OF PRIVILEGE

9.1 Pursuant to Rule 26(b)(5) of the Federal Rules of Civil Procedure, the Requesting Party, Receiving Party, and Producing Party hereby agree that a Producing Party may withhold or redact a Document if the Document withheld is protected by attorney-client privilege, the work-product doctrine, or any other applicable privilege.

9.2 If a Producing Party identifies portions of a Document and redacts such portions of the Document pursuant to an applicable Paragraph of this Order, the Producing Party must log the fact of redaction except if such redactions are solely to protect “sensitive personally identifying information” or “SPII.”

9.3 Privilege Logs: Privilege logs shall be provided in Excel format and identify at a minimum and to the extent such information is available in metadata, the following for each responsive Document withheld or redacted:

9.3.1 the name of the document author;

9.3.2 the names of the document’s recipients (including all cc’s and bcc’s);

9.3.3 the date the document was created, sent, or received;

9.3.4 the custodian of the document;

9.3.5 the type of document (email, spreadsheet, PowerPoint, etc.);

- 9.3.6 a brief description of the nature and subject matter of the document, to be populated by email subject, document title, or document filename to the extent available;
 - 9.3.7 the identity of the lawyer(s) involved in the claim of privilege;
 - 9.3.8 an indication of whether the Document or ESI has been redacted and produced or withheld in its entirety;
 - 9.3.9 the Bates number (if applicable) and any other identifier(s) for the document; and
 - 9.3.10 whether a non-email ESI file was a loose file or an email attachment.
- 9.4
- 9.5 The Privilege Log shall indicate for each document the privilege asserted (e.g., attorney-client, work product) and information on the basis for the assertion of the privilege that enables the other parties to assess the claim, regardless of whether such information is available from metadata.
- 9.6 For email threads, if the Producing Party does not choose to log separate entries for each lesser-included email in the thread, the Producing Party may instead log a single entry for the entire thread and produce a redacted version of the threaded email.
- 9.7 Should a Receiving Party be unable to ascertain whether or not a Document contained on the log is privileged or have reason to believe a particular entry on the log is responsive and does not reflect privileged information, the Receiving Party may request a meet and confer, and the Requesting Party, Receiving Party, and/or Producing Party, as appropriate, shall, meet and confer about such deficiencies. The Producing Party shall provide additional information reasonably necessary for the Receiving Party to determine if the Document has been properly withheld or redacted.

9.8 Documents Presumptively Excluded from the Privilege Logs.

9.8.1 Communications on or after the earlier of July 27, 2018, or the date a party received a Civil Investigative Demand from the U.S. Department of Justice related to an investigation concerning the subject matter of this litigation, exclusively between a Producing Party (either a defendant or plaintiff) and its outside counsel or experts in this litigation or the related DOJ investigation.

9.8.2 Work product created for or in anticipation of this litigation or the related DOJ investigation.

9.9 In the interest of time, and to minimize litigation costs, the Requesting Party and Producing Party may in good faith negotiate the exclusion of additional categories of Documents that even if technically responsive are relatively unimportant to the issues in the litigation and likely to be privileged or protected by the work-production doctrine.

10 PROPER BASIS FOR REDACTIONS AND WITHOLDING OF DOCUMENTS

10.1 A party may redact or withhold responsive documents only on grounds of (1) attorney-client privilege or any other applicable privilege; (2) protection under the work-product doctrine; (3) SPII, as discussed below; or (4) commercially sensitive information, as discussed below. If any member of a Document Family is responsive, the Producing Party shall produce all family members and/or portions thereof that are not independently protected as privileged or work-product. Because of the risk of irreparable harm to individuals, such as identity theft: (1) an otherwise responsive document that contains personal medical or health records not relevant to this litigation or protected by HIPAA, personal credit card or personal bank account numbers, social

security numbers, or tax identification numbers of individual Plaintiffs, individual employees or agents of the Parties, or individuals not a Party to this litigation (together, “sensitive personally identifying information” or “SPII”) may be redacted to exclude SPII; and (2) a document that is a member of a family that includes one or more responsive documents may be withheld if it contains exclusively SPII. A Producing Party may redact specific highly confidential business information relating to non-advertising businesses provided (1) the redacted information is both nonresponsive and irrelevant, and (2) the redacted information would not assist in understanding or providing context for the relevant portion of the document or document family of which it is a part.

- 10.2 If a Producing Party, for any reason, subsequently produces a Document/ESI withheld and place-holdered or redacted pursuant to this Order, the Producing Party shall produce that Document pursuant to the production format specifications of this Order that would have been applicable to the Document had it been produced initially (including provision of applicable load files necessary to link the replacement file to other previously produced document family members), except that the Producing Party shall apply an appropriate numerical suffix to the Bates number of the file to account for instances where the produced version of the file occupies more pages than the original placeholder image for the file. If the Producing Party’s production software does not support the required numerical suffix, the Producing Party may, at the time of the production of the withheld Document/ESI, produce such Document/ESI with a new Bates number so long as a cross reference chart from the original Bates number to the new Bates numbers is provided in Excel format. As an example, if a Producing Party

initially withholds a five-page Word document and provides a placeholder image branded with the number ABC-000000001, the subsequently produced version of that five-page Word document shall be branded ABC-000000001.001 through ABC-000000001.005.

Date: 2-11-21

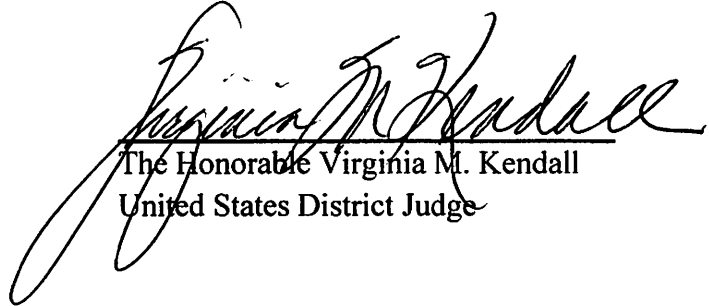

The Honorable Virginia M. Kendall
United States District Judge

EXHIBIT A

1. COVER LETTER

A cover letter or email shall be included with each production and shall include information sufficient to identify all accompanying media (hard drive, thumb drive, DVD, CD, secure FTP), shall identify each production on such media by assigning a Production Volume name or number, and shall include the Bates range for the Documents produced in each volume.

2. PRODUCTION LOAD FILES

There will be two Load/Unitization files accompanying all Productions of ESI.

- The first will be a Metadata import file, in Concordance-format delimited file with a .DAT file extension, that contains the agreed upon Metadata fields in UTF-8 encoding.
- The second will be a cross-reference file that contains the corresponding image information identifying document breaks. The acceptable formats for the cross- reference files are .log and .opt.
- **Image Load Files**
 1. The name of the image load file shall mirror the name of the delivery volume, and shall have the appropriate extension (e.g., ABC001.OPT).
 2. The volume names shall be consecutive (e.g., ABC001, ABC002, *et seq.*).
 3. There shall be one row in the load file for every TIFF image in the Production.
 4. Every image in the delivery volume shall be cross-referenced in the image load file.

5. The imageID key shall be named the same as the Bates Number of the page.
6. Load files shall not span across media (e.g., CDs, DVDs, hard drives, etc.), *i.e.*, a separate volume shall be created for each piece of media delivered.
7. Files that are the first page of a logical Document shall include a “Y” where appropriate. Subsequent pages of all Documents (regular Document, Email, or attachment) shall include a blank in the appropriate position.

- **Concordance Data Load Files:**

1. Data load files shall be produced in Concordance .DAT format.
2. The data load file shall use standard Concordance delimiters:
3. Comma - ¶ (ASCII 20);
4. Quote - ¢ (ASCII 254);
5. Newline - ® (ASCII 174).
6. The first line of the .DAT file shall contain the field names arranged in the same order as the data is arranged in subsequent lines.
7. All date fields shall be produced in mm/dd/yyyy format.
8. All attachments shall sequentially follow the parent document/email.
9. Use carriage-return to indicate the start of the next record.
10. Load files shall not span across media (e.g., CDs, DVDs, hard drives, etc.); a separate volume shall be created for each piece of media delivered.

11. The name of the data load file shall mirror the name of the delivery volume, and shall have a .DAT extension (e.g., ABC001.DAT).
12. The volume names shall be consecutive (e.g., ABC001, ABC002, *et seq.*).
13. If foreign language / Unicode text exists, the .DAT file shall be in UTF-8 or UTF-16 format where appropriate, consistent with this Order.

3. OCR/Extracted Text Files

1. OCR or Extracted Text files shall be provided in a separate \TEXT\ directory containing Document level text files.
2. If Foreign Language/Unicode text exists, TEXT files shall be in appropriate UTF-8 or UTF-16 format.

3. IMAGES

All images shall be generated from ESI in a Single Page Group IV TIFF file that reflects the full and complete information contained in the original source Document, with image resolution of 300 DPI.

All black and white images must be in 1-bit TIFF image format and color Documents must be in a single page 24-bit JPG image format.

Paper size shall be 8.5 x 11 inches unless in the reasonable judgment of the Producing Party, a particular item requires a different page size.

If a Receiving Party reasonably deems the quality of the Document produced in TIFF format to be insufficient, the Parties will meet and confer in good faith to determine whether the Producing Party must produce the Document in Native Format, or as a JPEG file, and whether such Document must be produced as a color image.

If a Receiving Party reasonably believes that a Document originally produced in black and white needs to be produced in color, it shall notify the Producing Party. The Parties agree to meet and confer in good faith concerning the re-production of such Document(s) in color either as a JPEG file or in Native Format.

File Naming Convention: Match Bates Number of the page.

Original Document orientation or corrected orientation shall be retained.

**4. ESI (AND PAPER TO THE EXTENT APPLICABLE)
PRODUCTION METADATA FIELDS**

Field Name	Description
BegBates	Beginning Bates Number.
EndBates	Ending Bates Number.
BegAttach	Beginning Bates Number of the first Document in a Document family range. Documents that are part of Document families, i.e., containing parents and attachments, should receive a value.
EndAttach	Ending Bates number of the last Document in attachment range in a Document Family range. Documents that are part of Document Families, i.e., containing parents or attachments, should receive a value.
AttachmentCount	Populated for Email parent records and indicates the number of attachments that constitute the whole family (BegAttach to EndAttach)
Custodian	Name of the Custodian of the Document Produced, to the extent reasonably and technically available.
AllCustodian	The AllCustodian field shall reference the Name(s) of all Custodian(s) who were in possession of a de-duplicated Document, to the extent reasonably and technically available.
FileName	Filename of the original source ESI.

Field Name	Description
NativeLink	Path and filename to produced Native Format file (see Paragraph 6.4).
EmailSubject	Subject line extracted from an Email.
Importance	Email importance flag, to the extent reasonably and technically available
Title	Title field extracted from the Metadata of a non-Email.
Author	Author field extracted from the Metadata of a non-Email.
From	From or Sender field extracted from an Email.
To	To or Recipient field extracted from an Email.
CC	CC or Carbon Copy field extracted from an Email.
BCC	BCC or Blind Carbon Copy field extracted from an Email.
DateSent	Sent date of an Email (mm/dd/yyyy format).
TimeSent	Time of an Email (hh:mm:ss format).
DateReceived	Received date of an Email (mm/dd/yyyy format).
TimeReceived	Received time of an Email (hh:mm:ss format).
DateCreated	Creation date of a file (mm/dd/yyyy format).
TimeCreated	Creation time of a file (hh:mm:ss format).
DateLastModified	Last modification date (mm/dd/yyyy format).
TimeLastModified	Last modification time (hh:mm:ss format).
DateLastPrinted	The date the Document was last printed.
DateAccessed	The last accessed date of the Document.
File Extension	File extension of Document (.msg, .doc, .xls, etc.).
Full Text	File path to full text/OCR File.
Confidentiality	“CONFIDENTIAL” or “CONFIDENTIAL – ATTORNEYS’ EYES ONLY,” if a Document has been so

Field Name	Description
	designated under any Stipulated Protective Order filed with the Court; otherwise, blank.
Message-ID	Unique identification number that permits threading of email conversations. For instance, the Outlook Message ID assigned by the Outlook mail server, if applicable.
ConversationIndex	Unique alphanumeric identifier for an email conversation, which may be populated by the e-mail client for each outgoing message.
HASHValue	MD5 or SHA Hash value of the file.
FolderPath	The path to the original folder in which the Document was located.
FileSize (in bytes)	Size of the file in bytes.
PageCount	The number of pages in the file.
RecordType	To indicate "Email," "Email Attachment," "Loose File," or "Hard Copy."
Application	Indicates software application that generated the ESI item (e.g., Outlook, Word).
Production Volume	Production volume name or number.
Redacted	User-generated field that will indicate redactions. "X," "Y," "Yes," "True," are all acceptable indicators that the Document is redacted. Otherwise, blank.
Redaction Basis	Basis for redaction, including "Attorney-Client/Work Product," "SPII," and "Irrelevant Highly Confidential Business Information"
SourceParty	The Producing Party.
Time Zone	The time zone used for ESI processing.

Field Name	Description
EST MasterDate	For Parties processing data in a time zone other than Eastern Standard Time, this field would reflect the date as converted to Eastern Standard Time. For emails, this field would correspond to the DateSent value. For all non-email ESI, this field would correspond to the DateLastModified value.
EST MasterTime	For Parties processing data in a time zone other than Eastern Standard Time, this field would reflect the time as converted to Eastern Standard Time. For emails, this field would correspond to the TimeSent value. For all non-email ESI, this field would correspond to the TimeLastModified value.

5. SYSTEM FILES

Common system files defined by the NIST library (<http://www.nsrl.nist.gov/>) need not be produced. Files identified as zero bytes in size shall be filtered out and not produced in the load file.